Station #5: Alkalinity Work Sheet

Background

Alkalinity is a measure of the ability of a body of water to resist changes in pH when acids are added. Acid additions generally come from rain or snow, although soil sources may also be important in some areas. Alkalinity is generated when water dissolves in rocks, such as calcite and limestone. The alkalinity of natural waters protects fish and other aquatic organisms from sudden changes in pH.

Procedure

- Following the steps in the *Alkalinity Procedure*, each member of the group takes a turn measuring the alkalinity of the same sample of tap water. Compare your results. Are they within one drop or titrator unit of each other? Why? Why not? If not, repeat this exercise with another tap water sample until you are obtaining results within one drop or titrator unit.
- Test the water samples you have brought to class from other sources.
- List the source of the water sample and the results obtained as per the example below. Compare the alkalinity of these samples. What is the range of results? Why are there variations?

Student	Sample tested	Reading